



A.D. 1874, 3rd July. N° 2315.

SPECIFICATION

OF

JOHN BENTLEY.

RAISING SEWAGE.

LONDON:

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1875.



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Raising Sewage.

(This Invention received Provisional Protection only.)

PROVISIONAL SPECIFICATION left by John Bentley at the Office of the Commissioners of Patents, with his Petition, on the 3rd July 1874.

I, JOHN BENTLEY, of Birmingham, in the County of Warwick, Engineer,
5 do hereby declare the nature of my said Invention for "AN IMPROVED
SANITARY APPARATUS OR PUMP FOR RAISING AND DELIVERING SEWAGE OR OTHER
DILUTED REFUSE MATTER, BUT WHICH SAID APPARATUS IS ALSO APPLICABLE
FOR ELEVATING AND DELIVERING WATER OR OTHER FLUIDS," to be as follows
(that is to say):—

10 My Invention consists in the use of a cylinder of the desired length
supported by preference in a greater or less diagonal direction on a
wooden stand or other convenient appliance; and at the lower end of
this cylinder are one or more lateral or other openings, which form the
inlet, as hereafter will be understood; and in connection with this part
15 a stay is formed, fitted with a concentric brass or other bearing, in
which a concentric shaft works, the said shaft being fitted with a spiral
blade, the periphery of which is the size of the internal diameter of the
cylinder, allowance being made for free working. This concentric shaft
is fitted at the top of the cylinder in suitable bearings, capped with a

Bentley's Improved Apparatus for Raising Sewage.

spur or bevel wheel or other suitable gearing, and connected with corresponding gearing to a shaft for receiving a fast and loose pulley, on which a band may be placed from a steam engine or other prime mover to give a revolving motion to the internal shaft and spiral, and at or near the top of the apparatus a suitable outlet is provided. 5

By way of illustration I will suppose that the lower part of this simple apparatus is submerged in the semi-fluid deposit, the said deposit been deodorised by the admixture of lime or other antiseptic compound necessary in an intercepted system of dealing with the sewage of large towns, and as such deposit requires continuous removal my apparatus 10 as above described is particularly applicable for the purpose, as by the revolving motion imparted to the spiral a continuous stream of such sewage refuse is elevated for delivery or conveyance by suitable channels in any desired direction.

Although I have described the apparatus as being worked from the 15 top it is evident that by an extended or suitable inlet the same apparatus may be as conveniently worked from the bottom, and is applicable also for other purposes than herein described.

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Printers to the Queen's most Excellent Majesty. 1875.

